

campaign.

3. (Amended) The method of Claim 2 wherein the predetermined set of characteristics comprises a predetermined set of user attributes.

4. (Amended) The method of Claim 3 wherein the predetermined set of user attributes constitute user attributes likely to pertain to a product to which the marketing campaign is directed.

5. (Amended) The method of Claim 4 further comprising:  
determining in the data mining engine a set of prevalent attributes of the subset of users;

defining a target database of users and determining in the data mining engine a target subset of users in the target data base statistically correlated to the set of prevalent attributes.

6. (Amended) The method of Claim 5 wherein the target database comprises the user database with which the data mining engine has been trained.

7. (Amended) The method of Claim 5 wherein the target database comprises an additional database not included in the user database, the additional data base defining characteristics of a set of new users.

9. (Amended) The method of Claim 8 further comprising:  
forming a focused group of the target subset of users whose observed response was a particular type of response;

determining, in the data mining engine, a group of prevalent characteristics of the focused group of users;

defining a database to be mined and determining, in the data mining engine, a new set of users in the database to be mined whose characteristics are statistically correlated with the group of prevalent characteristics.

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A4  
D1  
10. (Amended) The method of Claim 9 wherein the database to be mined comprises the user database with which the data mining engine was trained.

11. (Amended) The method of Claim 9 wherein the database to be mined comprises the target data base of users.

12. (Amended) The method of Claim 9 wherein the database to be mined comprises a new database not included in either the user data base nor in the target user database.

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**Please cancel claim 18 without prejudice or disclaimer**

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19. (Amended) The method of Claim 1 wherein clustering comprises:  
providing with a visualization tool a tabulation of characteristics of each cluster with the probability of each characteristic in the cluster,  
labeling each cluster with a statistically predominant characteristic thereof ii accordance with the tabulation.

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Sub B2  
21. (Amended) A method of personalizing marketing resources, comprising:  
providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

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providing a user data base correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the characteristics comprising at least one of: (a) at least one of the user's attributes, (b) at least one of the user's preferences;

training the data mining engine with a set of training data comprising the user data base by clustering the users in the database into segments of users with similar characteristics;

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inputting to the data mining engine a set of user attributes of one of: (a) a particular user, (b) a particular group of users; and, in response thereto,

obtaining from the data mining engine a subset of the adaptable marketing features

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A8 B3  
having the highest correlation to the set of user attributes by determining which of the segments has characteristics that are statistically correlated with the set of user attributes; and wherein the subset of marketing features is determined based upon the preferences of the segments statistically correlated to the set of user attributes.

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**Please cancel claim 30 without prejudice or disclaimer.**

sub B3

31. (Amended) A method of controlling the marketing resources of a site having a real-time user interface during a visit to the site by a particular user, comprising:

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providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user database correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the characteristics comprising at least one of: (a) user attributes, (b) user preferences;

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training the data mining engine with a set of training data comprising the user database by clustering the users in the data base into segments of users with similar characteristics ;

inputting to the data mining engine a set of user attributes of the particular user and, in response thereto, obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the segments has characteristics that are statistically correlated with the set of user attributes; and wherein

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the subset of marketing features is determined based upon the preferences of the segments statistically correlated to the set of user attributes..

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**Please cancel claim 40 without prejudice or disclaimer.**

41. (Amended) The method of Claim 31 wherein inputting is preceded by determining the attributes of the particular user.

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44. (Amended) The method of Claim 41, wherein determining comprises:

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clustering the users in the user data base into different segments of users having similar characteristics relative to responses to different ones of the marketing features; observing characteristics of the particular user through a real-time user interface of the site; assigning the particular user to at least one of the segments based upon the characteristics observed through the interface.

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47. (Amended) The method of Claim 46 further comprising:  
comparing a distribution of the observed responses across the marketing features of the presentation to corresponding distributions in different ones of the segments so as to detect any errors in the assignment of the particular user to a segment; and  
correcting the assignment of the user to a different segment in response to the detection of an error.

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51. (Amended) A marketing management system, comprising:  
a data warehouse storing a user database correlating individual users with observed characteristics comprising at least one of user attributes and user preferences and with observed responses to a set of marketing features;  
a profiler comprising a data mining engine constructed with training data comprising the user database;  
a personalization system for tagging individual users with labels from which user characteristics may be inferred; and  
a personalized application component responsive to the profiler and to the personalization system and which correlates a user with a subset of the marketing features based upon the user's characteristics, said personalized application component comprising:  
a real-time user interface with the user; and  
a feedback component for capturing observed responses of the user to the marketing campaign through the user interface and feeding them to the data warehouse for processing by the data mining engine of the profiler.

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Please cancel claim 53 without prejudice or disclaimer

54. (Amended) A marketing management system, comprising:  
a data warehouse storing a user data base correlating individual users with observed  
characteristics comprising at least one of user attributes and user preferences;  
a profiler comprising a data mining engine constructed with training data  
comprising the user data base;  
a personalization system for tagging individual users with labels from which user  
characteristics may be inferred;  
a marketing management console responsive to the profiler and to the  
personalization system and which correlates a set of user characteristics selected based  
upon a product which is to be marketed in the marketing campaign [identified for a  
marketing campaign] with a subset of the users in the user data base having a maximum  
probability of favorable response to the marketing campaign directed toward the set of user  
characteristics in accordance with the training data; and  
a feedback component for capturing observed responses to the marketing campaign  
and feeding them to the data warehouse for processing by the data mining engine of the  
profiler.

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Cancel claims 55 - 57 without prejudice or disclaimer

58. (Amended) A machine-readable medium having instructions stored thereon for  
execution by a processor to perform a method comprising:  
providing a data mining engine capable of being trained with training data and  
capable thereafter of performing inferences relative to the training data; and on additional  
data;  
providing a user database defining the observed characteristics of each one of a set  
of users, the characteristics comprising at least one of: (a) at least one of the user's  
attributes, (b) at least one of the user's preferences;  
training the data mining engine with a set of training data comprising the user  
database by clustering the user data base into different segments of user distinguished by

different states of a characteristic;

inputting to the data mining engine a predetermined characteristic pertaining to the marketing campaign and, in response thereto, obtaining from the data mining engine a subset of the users in the data base having the highest correlation to the characteristic by determining which of the segments found during clustering of the user data base has the highest statistical correlation to the predetermined characteristic.

59. (Amended) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user data base correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the characteristics comprising at least one of: (a) at least one of the user's attributes, (b) at least one of the user's preferences;

training the data mining engine with a set of training data comprising the user data base by clustering the users in the database into segments of users with similar characteristics;

inputting to the data mining engine a set of user attributes of one of: (a) a particular user, (b) a particular group of users; and, in response thereto,

obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the segments has characteristics that are statistically correlated with the set of user attributes;

and wherein the subset of marketing features is determined based upon the preferences of the segments statistically correlated to the set of user attributes.

60. (Amended) A machine-readable medium having instructions stored thereon for execution by a processor to perform a method comprising:

providing a data mining engine capable of being trained with training data and capable thereafter of performing inferences relative to the training data;

providing a user data base correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the characteristics comprising at

least one of: (a) user attributes, (b) user preferences;

training the data mining engine with a set of training data comprising the user database by clustering the users in the database into segments of users with similar characteristics;

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*Q6* inputting to the data mining engine a set of user attributes of the particular user and, in response thereto, obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes by determining which of the segments has characteristics that are statistically correlated with the set of user attributes; and wherein

10 the subset of marketing features is determined based upon the preferences of the segments statistically correlated to the set of user attributes.

*Sub B4* 61. **(Amended)** A method for managing a marketing campaign, comprising:  
providing a data mining engine capable of being trained with training data and  
15 capable thereafter of performing inferences relative to the training data;

providing a user database correlating observed characteristics of each one of a set of users with a set of adaptable marketing features, the characteristics comprising at least one of: (a) at least one of the user's attributes, (b) at least one of the user's preferences;

20 *Cont*  
*Q15* training the data mining engine with a set of training data comprising the user database;

first inputting to the data mining engine a predetermined characteristic pertaining to the marketing campaign and, in response thereto, obtaining from the data mining engine a subset of the users in the data base having the highest correlation to the characteristic;

25 second inputting to the data mining engine a set of user attributes of the subset of the users, and, in response thereto, obtaining from the data mining engine a subset of the adaptable marketing features having the highest correlation to the set of user attributes;

monitoring observed responses to the marketing campaign cycle and updating the user database based upon the observed responses; and

30 repeating the first and second inputting to obtain an updated subset of users and an updated subset of marketing features.

Please cancel claim 63 without prejudice or disclaimer.

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5 64. (Amended) The method of Claim 61 further comprising:  
conducting a subsequent marketing campaign cycle based upon the updated subsets  
of users and marketing features.

#### Remarks

10 By the present amendment claims 18, 30, 40, 55 – 57, and 63 are cancelled without  
prejudice or disclaimer. Claims 1 – 17, 19 – 29, 31-39, 41 – 54, 58 – 62, and 64 remain  
pending. Reconsideration of the pending claims is requested.

The specification has been amended to make the reference characters in the  
specification consistent with the drawings as filed in this application. Reference character  
“120” has been deleted from the application.

15 Claim 1 features a method for managing a marketing campaign and includes  
providing a data mining engine capable of being trained with training data. After this  
training the data mining engine is capable of performing inferences relative to the training  
data and on additional data. Claim 1 also features providing a user database which defines  
observed characteristics of each one of a set of users. The characteristics include at least  
20 one of: (a) at least one of the user’s attributes, (b) at least one of the user’s preferences.  
The data mining engine is trained with a set of training data from the user database by  
clustering the user database into different segments of users distinguished by different  
states of a characteristic. A predetermined characteristic pertaining to the marketing  
campaign is input to the database and, in response thereto, the data mining engine provides  
25 a subset of the users in the data base having the highest correlation to the characteristic.  
This is accomplished by determining which of the segments found during clustering of the  
user data base has the highest statistical correlation to the predetermined characteristic.

Relevant portions that describe the model builder 14 described in the ‘411 patent to  
Thearling are found at column 8, line 12. The model computes a new value or other  
30 parameter based on one or more fields with the records of the training data. “the program  
permits development of models for scoring a database based on a variety of paradigms,